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ABSTRACT

A study examined the perceived training and retraining needs of Iowa business/organizations and employer views regarding how the continuing education divisions of Iowa's community colleges can best meet those needs. Of the 1,069 Iowa employers contacted, 608 (56.9%) responded. According to the respondents, Iowa's system of community college continuing education divisions is indeed responding to business/industry needs for work force training and retraining. The work force training being provided was considered to be of high quality and flexible and was seen as having a significant impact in meeting the economic and educational needs of Iowa's citizens and businesses. Nearly all respondents reported that substantial proportions of their current work forces need additional training and considered technological change to be an important factor increasing the need for work force training. Of the respondents, 28.5% were very familiar with Iowa work force training programs and 61.5% were only somewhat familiar with them. It was recommended that Iowa's community colleges review and augment their marketing programs and that the state increase funding levels of existing and emerging work force training programs. (Contains 12 tables/figures and 22 references. Appended are the names/addresses of the members of the Iowa Association of Adult and Continuing Education Deans and Directors.) (MN)

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EXECUTIVE SUMMARY

Iowa Workforce Training Study

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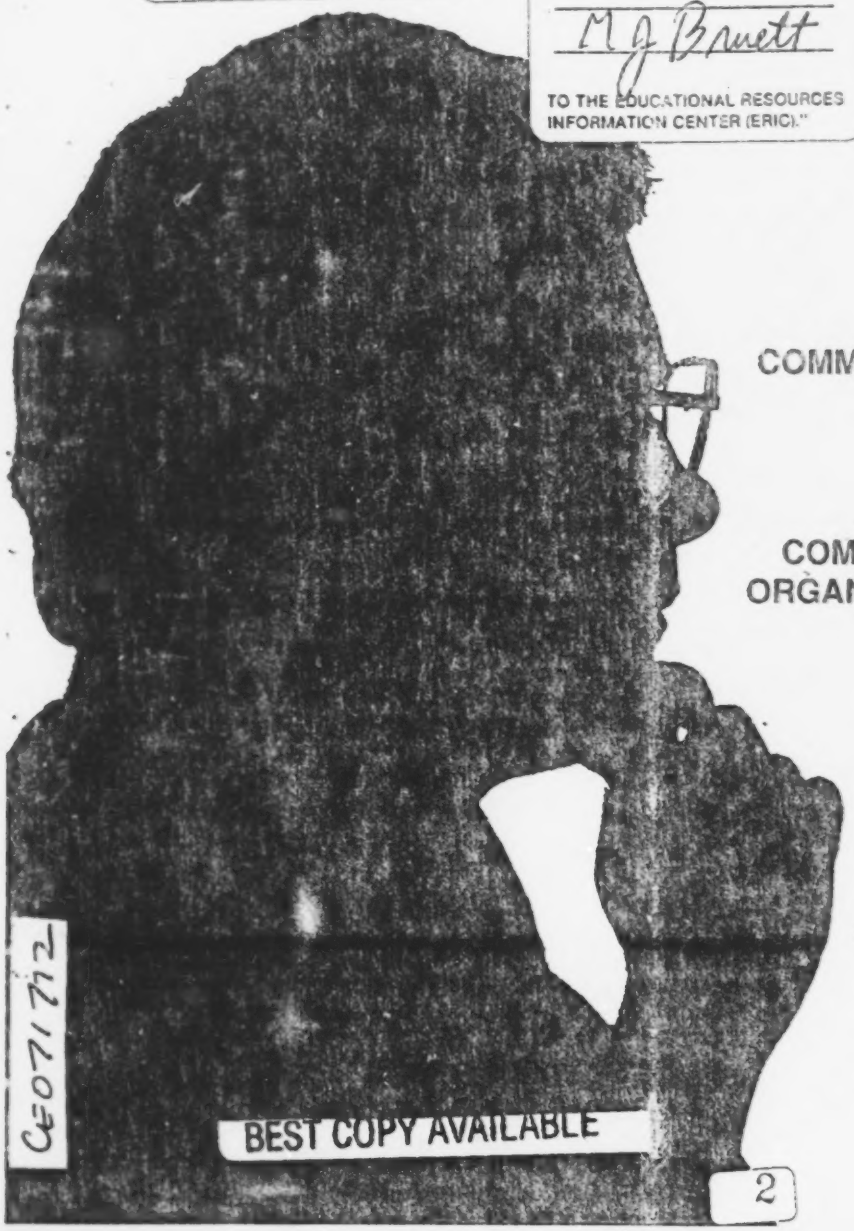

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Iowa Association of Adult & Continuing Education Deans & Directors

APRIL 1996

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Executive Summary
Iowa Workforce Training Study

Prepared by
Iowa Association of Adult and Continuing Education
Deans and Directors

April 1996

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JOY CORNING
LT. GOVERNOR

Foreword

The network of community colleges in Iowa is a strong and successful post-secondary education system. The community college system has served the State of Iowa for over 30 years offering many types of educational programs and business and industry training in a comprehensive manner.

The mission of these colleges includes economic and workforce development through lifelong learning programs and customized training. With increasing international competition, it is important that community colleges work closely with business and industry to develop programs that increase the skill level of Iowa's workforce.

My first-hand experience with this kind of collaboration began several years ago when I initiated a workplace literacy special project. I talked personally with workers as well as individuals in management positions of many of Iowa's industries encouraging linkage with community college resources in order to increase workers' basic skills--reading skills, computing skills, thinking skills. So, I am enthused that the collaboration process continues to be effective and has expanded to include yet additional entities involved in workforce development--other education and employment services, for instance.

Because there is a need for community college education to be accountable to the population it serves, this study upgrades the results of the original Iowa Workforce Training Survey conducted in 1991. A total of 608 businesses and industries responded to this latest study. It represents a pro-active, collaborative effort among four education entities: (1) Iowa's community colleges, (2) Iowa's business and industry, (3) National Council on Community Services and Continuing Education (NCCSCE), and (4) COMBASE, an organization that represents community based education.

Workforce development and training must continue to be a high priority for America's and Iowa's economic success. Competent, productive workers contribute economically, but perhaps even more significant is the personal satisfaction and confidence and commitment that comes from doing a job well. That, too, is an Iowa hallmark in which we take enormous pride and which greatly boosts the high quality of life we enjoy in this beautiful and bountiful state.

Joy Corning

Lieutenant Governor Joy Corning
State of Iowa

Preface

Driven by advanced technology, fast-paced innovation, and heightened global competition, the workplace in America is changing rapidly. Concepts such as new and emerging technology, participative management, statistical quality controls, and just-in-time production -- previously known to a few -- are now common vocabulary in today's corporate boardrooms. As the workplace changes, the level of skills needed by the workforce to accommodate these changes rises -- sometimes dramatically. The new workplace requires adaptive and innovative workers with strong interpersonal skills. This new worker will be expected to have as broad a set of skills as was previously required only of supervisors and management. Workers will be called upon to upgrade these skills regularly; career changes several times during a lifetime will be common.

This demand for training and retraining is often met through the nation's system of community colleges' continuing education divisions. Over the past three decades, Iowa's community colleges' continuing education divisions have been major providers of high quality workforce training to Iowa businesses and organizations. Through vocational/technical supplemental programs, 367,108[1] Iowa employees improved their workplace skills in academic year 1994-95 (Iowa Department of Education, 1995). Through these efforts Iowa businesses have been strengthened in order to succeed and survive in today's technologically advanced and global economy. An employer in the survey commented, "Job training and adult education programs have been very positive, and our employees need this local support to stay competitive." Another employer said, "We believe that our local community college is doing a good job. Life-long learning is critical, and the community college is central. Keep up the good work."

In large part, due to the positive experience of Iowa employers with these workforce training programs and the community college presence in every corner of the state, Iowa's community colleges' continuing education divisions have emerged as the most logical providers of workforce development training. In partnerships with business and industry, Iowa's community colleges comprise a high-quality, cost-effective, responsive workforce development delivery system (Iowa Association of Adult and Continuing Education Deans and Directors, 1996).

Workforce development and training must be a high priority for America's and Iowa's economic success. The results of this study will assist Iowa community colleges in their quest to become ever more effective as a workforce development and training delivery system.

[1] Official figure adjusted by 20 percent to reduce employee duplication in total count.

Acknowledgments

This document is prepared as part of the Iowa Workforce Training Study of 1996. This study is based on the research done by Dr. John W. Quinley of Central Piedmont Community College in Charlotte, North Carolina. Dr. Quinley based the Iowa findings as part of the study he completed for the National Council on Community Services and Continuing Education (NCCSCE) and COMBASE, a community based post secondary education association -- both Councils of the American Association of Community Colleges. The nationwide research project involved over 110 community colleges in over 24 states and surveyed over 3,000 employers. Iowa was the only state where every community college participated. Iowa colleges represented about 15 percent of the total number of colleges in the national study; Iowa employers were about 20 percent of all employers.

As part of a national effort, Dr. Quinley analyzed the Iowa data and prepared conclusions from a much broader perspective than ever before possible. Although not a part of this research report, comparisons of Iowa and national results will be available in August 1996 when the national report is published. The citizens of the State of Iowa are indebted to the National Council, COMBASE, and Dr. Quinley.

The study was made possible through the support of the Iowa Association of Community College Presidents and the Deans/Directors of Continuing Education. Also, special recognition should be given to the committee of Deans/Directors who assisted Dr. Quinley. The committee consisted of Bob Wells (chair), Gary Swaney, Ward Bean, Dr. Nancy Kothenbeutel, Dr. John Hartwig, and Dr. Bob Schlimgen.

These acknowledgments were written by Dr. Bob Schlimgen, February 1996.

EXECUTIVE SUMMARY

IOWA WORKFORCE TRAINING STUDY

Introduction

Workforce development systems focus on the customized training and retraining needs of business and industry. However, the important role of Iowa's community colleges in workforce development encompasses more: (1) apprenticeship training, (2) continuing education, (3) professional development programs, (4) Small Business Development Centers, (5) school-to-work transition programs, (6) youth apprenticeship, and (7) workplace basic skills and assessment (Iowa Association of Adult and Continuing Education Deans and Directors, Policy Paper on Workforce Development, 1996).

For the purposes of this study, workforce training was defined as those activities designed to improve the competencies and skills of current or new employees of business, industry, labor, and government. Such training is typically provided on a contract basis with the employer who:
(1) defines the objectives of the employee training, (2) schedules the duration of the training, (3) specifies the delivery mechanism by which training is provided, and (4) delineates competencies of the trainer. Workforce training is customer-driven, involves payment by the customer to the training provider, and is usually linked to some economic development strategy of the employer (Jacobs, 1992).

Purpose

This research study asks Iowa employers two basic questions:

1. *What are the training and retraining needs of businesses and organizations in Iowa?*
2. *How can Iowa community colleges' continuing education divisions best meet these needs?*

Several basic purposes of the study cluster around these two basic questions. The purposes are:

- Explore the extent and nature of training and retraining needs of the current Iowa workforce.
- Determine the value of community colleges in providing workforce training to state policy makers and the public.
- Illustrate the state-wide results and to make recommendations regarding Iowa community colleges as the primary workforce training delivery system.

This study is also, in part, a follow-up of a similar Iowa research study conducted in 1991, *A **Study of the Impact of Iowa Community College Continuing Education Programs.*** A secondary purpose of this study is to compare its findings with the findings of the earlier study.

Method

All fifteen Iowa community colleges' continuing education divisions participated in the study. The list of Iowa Community Colleges and the Iowa Association of Adults and Continuing Educations Deans and Directors are provided in Appendix A. Data were gathered through a survey mailed to Iowa employers who, in all but a few cases, were served by local Iowa community colleges in academic year 1994-95. Iowa community colleges sent workforce training surveys to 1,069 employers. Of these, 608 were returned -- a response rate of 56.9 percent.

The study asked employers to answer questions concerning their future need for training and their experiences with local community colleges in meeting prior workforce development needs. Employers were also encouraged to provide comments. Specific question areas follow in the list below:

- the proportion of their workforce which needed additional training:
- the extent to which training is needed in specific training skills areas:
- whether workforce programs should include non-credit, credit, or both non-credit and credit classes:
- the importance of specified goals for workforce training:
- whether distance learning approaches to training would benefit their companies:
- the effect changing technology has on the need for workforce training:
- reasons for selecting community colleges to meet their training needs:
- ratings of Iowa community college workforce training programs on several dimensions:
- whether they would recommend community college programs to other businesses.

Conclusions and Highlights of Results

This study offers three general conclusions. The conclusions, clustered with a summary of results that support each conclusion, are given below.

- ***The Iowa system of community college continuing education divisions is responding to the needs of Iowa businesses and organizations for workforce training and retraining.***

Types and Sizes Served. Iowa community colleges provided workforce training to employers in all types and sizes of businesses and organizations in Iowa. Of the employers who responded to the survey, the greatest concentration of service is in the industrial/manufacturing, health services, and government/public sectors; these types accounted for almost three-fourths of all employers served. The remaining categories accounted collectively for about one-fifth and individually for five percent or less of the total responses.

The majority of businesses served are small -- almost 60 percent are establishments with 100 employees or less. Just under one-third of the respondents were mid-sized (from 101 to 500 employees); large establishments (501 or more employees) comprised just over ten percent of the total number of employers served by Iowa community colleges.

Table 1[2]
Primary Types and Sizes of Businesses or Organizations Served

Type of Business	Freq.	Pct
Construction	20	3.3
Retail/Wholesale	15	2.5
Professional services	19	3.1
Industrial/Manufacturing	214	35.2
Health services	129	21.2
Hospitality services	4	0.7
Utility	11	1.8
Transportation	14	2.3
Finance/Insurance	30	4.9
Agricultural related	22	3.6
Government/Public	98	16.1
Miscellaneous services	7	1.2
Other	32	5.3

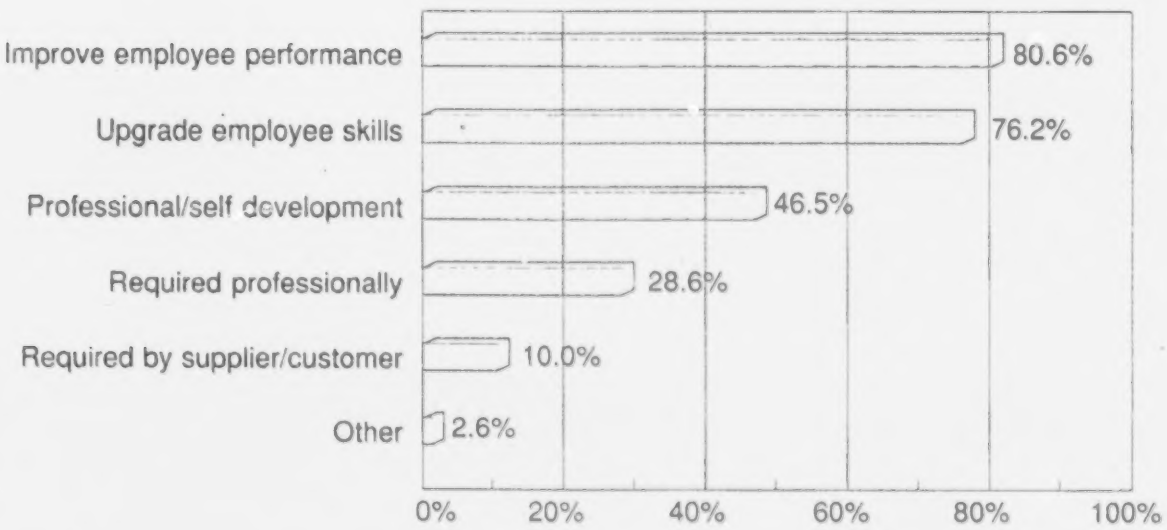
Size of Business	Freq.	Pct
1 - 10	39	6.8
11 - 25	83	14.5
26 - 100	209	36.4
101 - 500	172	30.0
501 +	71	12.4

Note: Businesses indicating more than one primary area were counted more than once.

[2] Percentages may not sum to 100 due to rounding error.

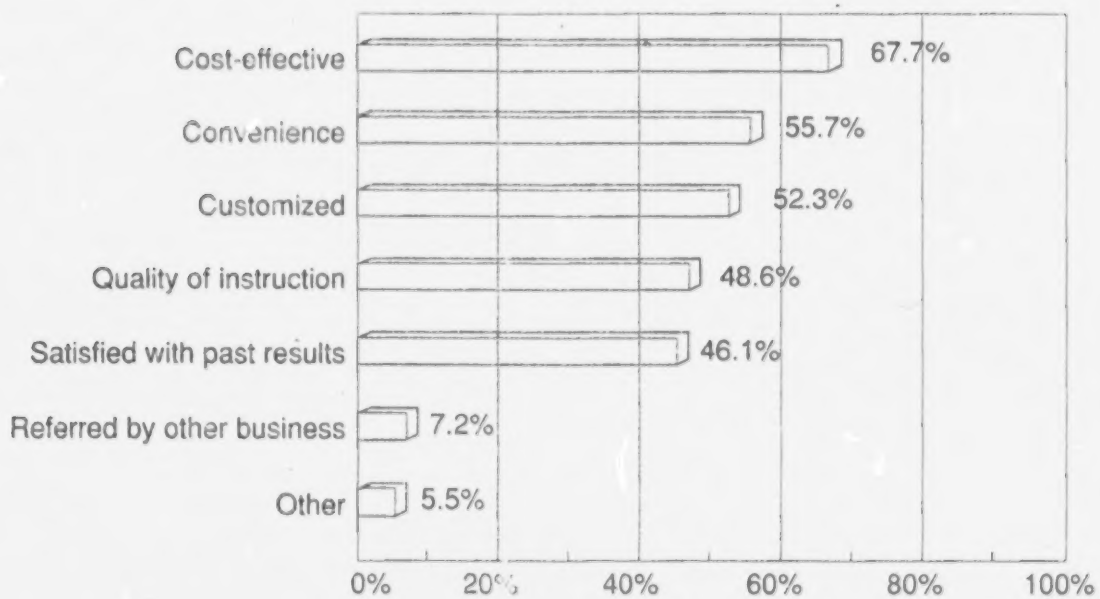
Goals of Employers. Three-fourths or more of the employers sought workforce training for their employees to improve employee performance and productivity or to upgrade employee skills. Almost one-half of the Iowa businesses and organizations contracted for workforce training programs with the goal of professional development or self-enrichment of their employees. Just over one-fourth of the respondents sought workforce training because it was required by the profession of the employee; ten percent of respondents sought training because it was required by their suppliers or customers.

Figure 1
Percent of Employers Indicating Various Goals for Workforce Training



Reasons for Selecting. Two-thirds of Iowa businesses and organizations chose Iowa community colleges to meet their need for workforce training because the programs were perceived as a cost-effective value for their investment. About one-half of the employers chose community colleges because: training at on-site locations was convenient, the training program was customized to meet specific needs, the quality of instruction was good, and past results led to additional contracts.

Figure 2
Reasons for Selecting Iowa Community College for Workforce Training



Employer comments corroborated these survey results. Typical comments included: "Filling the need at an acceptable cost, and they are convenient. We find the combination of easy access, cost, and quality of instruction very helpful." "Very cost effective, pro-active and responsive, with excellent staff."

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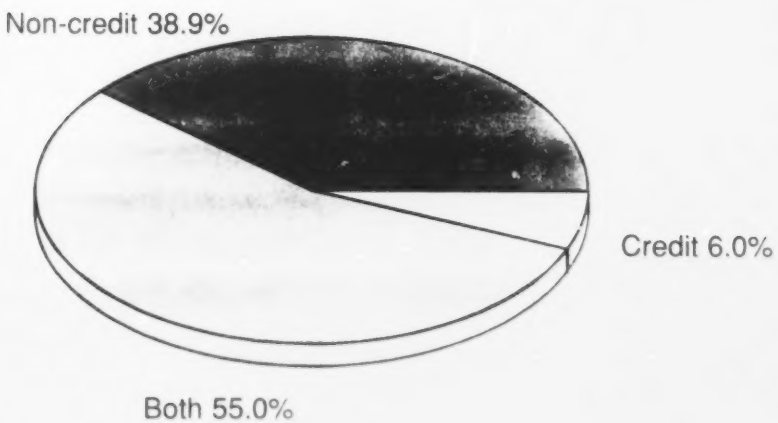
Need in Specific Training Areas. The need for additional skills training in specific areas varied considerably. Areas needed most (defined as 85 percent or more indicating "needed" or "much needed") were: professional development (86.7 percent), computer skills (86.0 percent), and interpersonal skills (85.3 percent). Specific skills areas needed second most (defined as 65 percent to 84 percent indicating "needed" or "much needed") were: communication skills (76.1 percent), government regulations (73.3 percent), critical thinking skills (71.5 percent), personal skills (68.1 percent), and business skills (67.9 percent). Specific skills areas needed relatively less often were technical skills (51.5 percent), computational skills (49.2 percent), global understanding skills (26.0 percent), and English as a second language (10.2 percent).

Table 2
Iowa Companies' Specific Training and Retraining Needs

	Not Needed %	Needed %	Much Needed %	Don't Know %	Not Applicable %
Technical skills	33.2	37.0	14.5	5.1	10.2
Computer skills	9.4	59.4	26.6	2.1	2.4
Business skills	21.9	55.5	12.4	4.9	5.3
Professional development	9.4	57.8	28.9	2.8	1.0
Communication skills	18.4	56.1	20.0	3.9	1.6
Computational skills	38.8	39.9	9.3	6.1	5.9
English, Second Language	77.8	8.7	1.5	1.8	10.2
Interpersonal skills	12.3	64.6	20.7	1.8	0.7
Government regulations	21.8	62.5	10.8	3.8	1.0
Critical thinking skills	20.6	57.9	13.6	6.5	1.4
Global understanding skills	56.0	24.0	2.0	6.2	11.9
Personal skills	23.4	54.9	13.2	6.5	1.9
Other skills	22.5	21.7	14.2	23.3	18.3

Need for Non-credit/Credit Classes. Employers are most interested in programs that included non-credit and credit classes (55.0 percent) or programs with just non-credit classes (38.9 percent). Six percent of employers were interested in programs offering only credit classes.

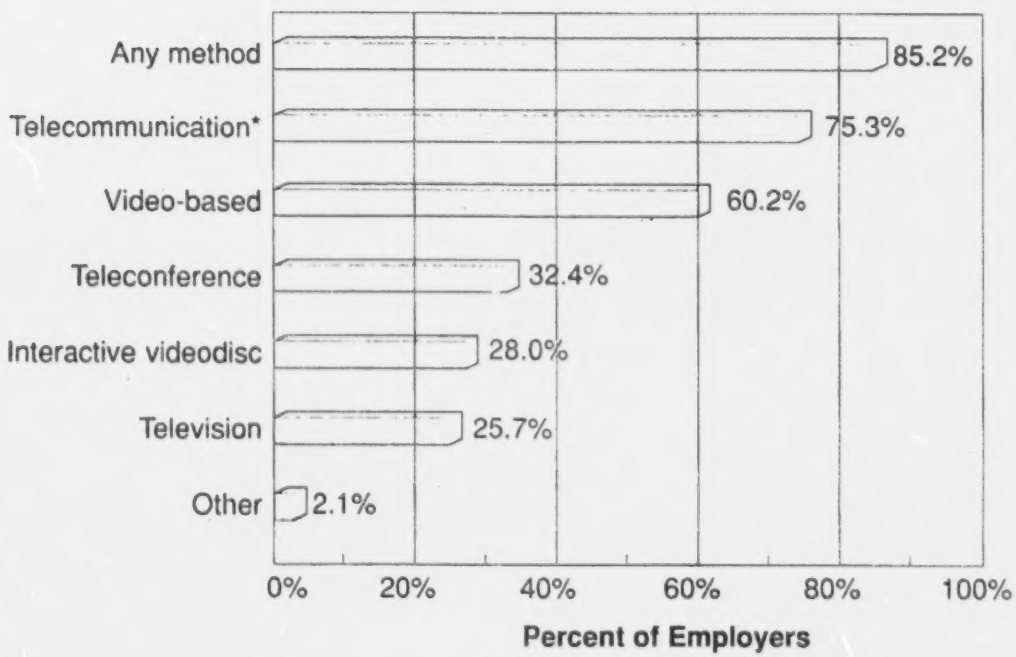
Figure 3
Type of Classes Needed



Benefits of Distance Learning. Distance learning methods of program delivery are increasingly becoming important components of workforce training programs. This idea was expressed in a comment made by one Iowa employer, "To stay in a global community we must continue to learn, and the best way would be at home via distance learning."

More than eight in ten employers saw distance learning technology as a potential benefit to workforce training efforts. Three-fourths of the employers checked one or more of the telecommunication options (video-based, teleconference seminars, or television-based). Video-based training received the largest single-item response with 60.2 percent checking this item.

Figure 4
Extent Distant Learning Seen as a Benefit



*Telecommunication includes video-based, teleconference, and television.

- *The Iowa system of community college workforce training is providing high quality, flexible workforce training programs to Iowa's businesses and organizations; the system has a significant impact in meeting the economic and educational need of Iowa citizens and businesses.*

Quality Ratings. Comments made by employers concerning the high quality of workforce training programs and, in particular, the quality of training were by a wide margin the most frequent responses. Employers also frequently commented about program flexibility and responsiveness. Indeed, positive comments about workforce training programs made by employers outnumbered negative comments by over ten to one. Iowa colleges are committed to providing what Iowa businesses and organizations need -- what they want, where they want it, and when they want it.

Typical comments made by employers include: "I have nothing but good to say about our local community college. I think they are doing an excellent job." "Your staff is great! We have had excellent instructors. We appreciate their flexibility, knowledge, and their effort to achieve expected results from our employees." "The college has been very good in working with our employees on an individual basis as well as in designing courses to meet our needs."

In the survey item results, the quality of the training provided was rated as "good" or "excellent" by 94.7 percent of employers. Ratings of other facets of Iowa's community college training programs were similarly high with "good" or "excellent" ratings varying from 86.4 to 90.5 percent. The other rating categories included "responsiveness to employer needs," "the cost of training," and skills of employees trained by Iowa colleges in technical areas, in computation, in interpersonal skills, and in communication.

Figure 5
Employer Ratings of Good or Excellent Concerning Aspects of Workforce Programs

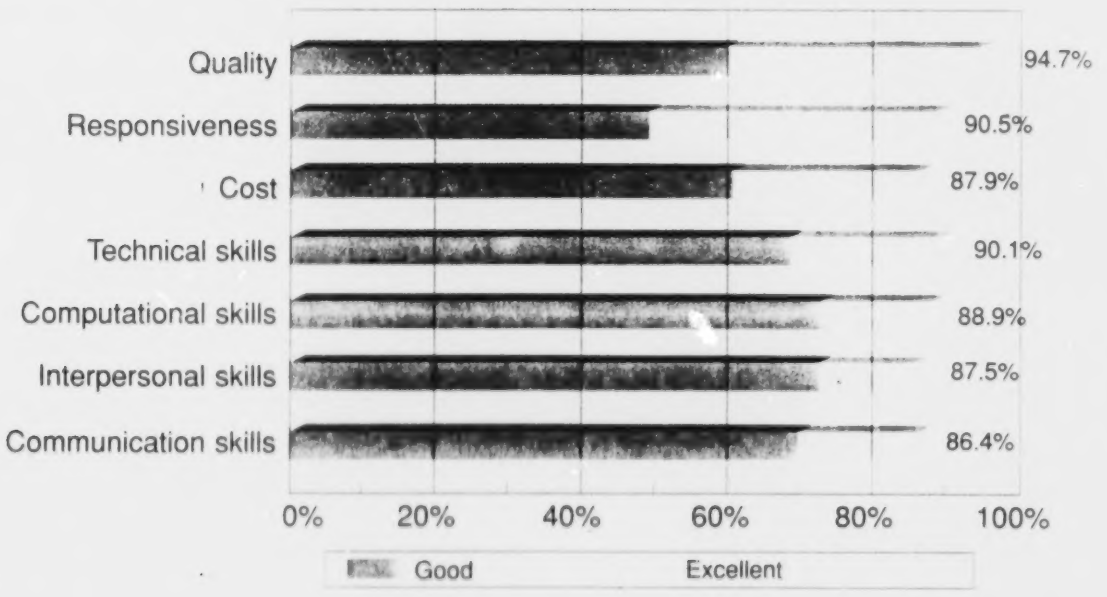


Table 3
Ratings of Iowa Community Colleges by Aspects of Workforce Program

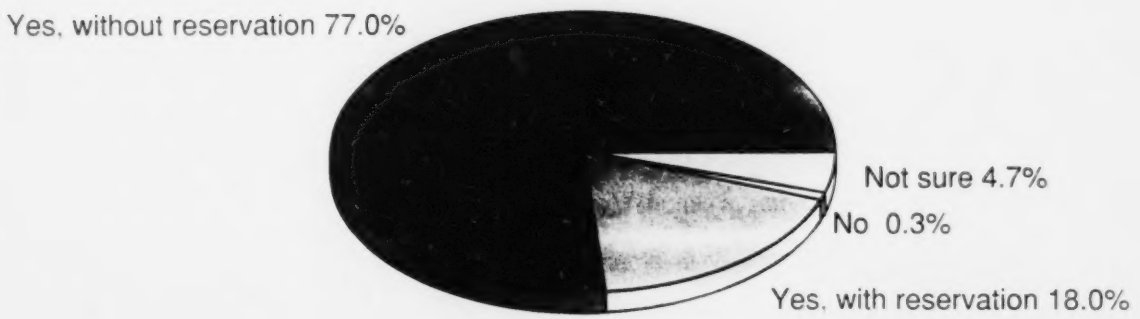
IOWA WORKFORCE TRAINING STUDY 1996

	Poor	Fair	good	Excel-lent
	%	%	%	%
Quality of training provided	0.2	5.1	59.4	35.3
Responsiveness to employer needs	0.5	9.0	50.2	40.3
Cost of training	0.9	11.1	60.7	27.2
Technical skills of employees educated by College	0.2	9.7	68.6	21.5
Basic computational skills of employees educated by College	0.6	10.5	74.0	14.9
Interpersonal skills of employees educated by College	1.0	11.5	73.7	13.8
Basic writing, speaking, communication skills of employees educated by College	0.8	12.8	70.3	16.1

The 1991 Iowa workforce training study also reported a high degree of satisfaction with the quality of training. Figures for the 1991 study were: very satisfied (39.7 percent), satisfied (56.7 percent), uncertain (3.0 percent), unsatisfied (0.4 percent), and very unsatisfied (0.2 percent).

Recommend Programs. The bottom-line rating item asked of Iowa employers in regard to Iowa community college workforce training programs was whether or not the employer would recommend this training to other businesses. Almost all (95.0 percent) of businesses and organizations would recommend without reservation (77.0 percent) or recommend, with reservations (18.0 percent), Iowa community college training programs to other businesses. Less than five percent of the respondents were not sure about a recommendation and only two respondents would not recommend an Iowa community college.

Figure 6
Percentage of Employers Would Recommend Iowa Community College



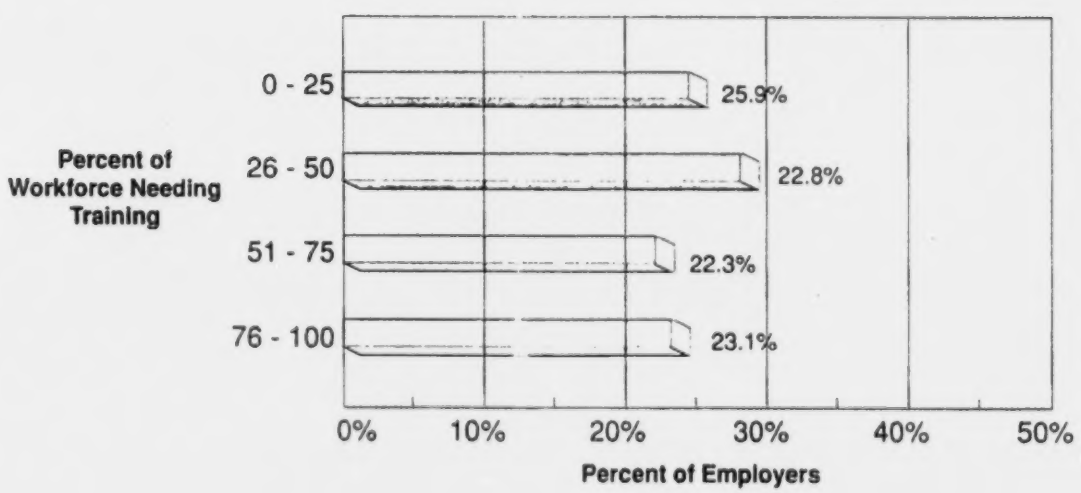
One employer summed up the survey results in his comments, "I recommend using the college for job training and for helping with job expansion and training. The college has many good ideas for our uses." Another employer remarked that, "our employees need this local support to stay competitive."

A high proportion of the respondents in the 1991 Iowa workforce training study also would recommend Iowa community colleges' workforce training programs. Figures for the earlier study were 95.6 percent "yes," 0.2 percent "no," and 4.2 percent "not sure."

- ***Current projections clearly indicate not only a continued need, but an increasing need for training and retraining programs for Iowa's business and organizations. The community college system of workforce training is in a position to meet these increased demands for workforce development.***

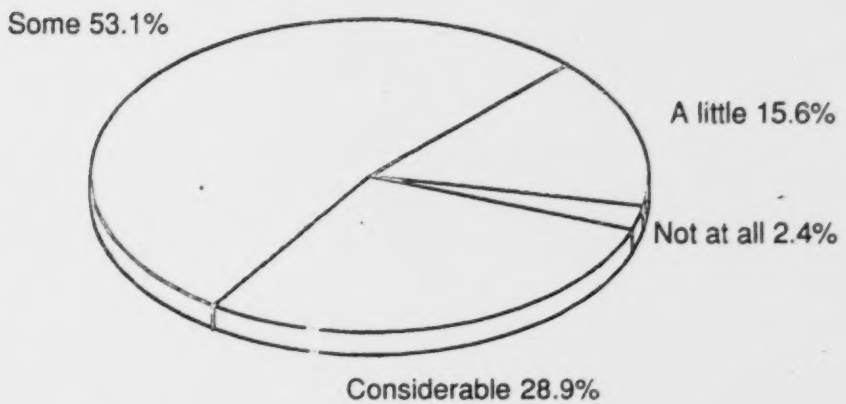
Current Training Need. Iowa businesses reported that a substantial proportion of their current workforce needs additional training. About one-fourth of the employers estimated that over three-fourths to all of their current workforce needs additional training; almost one-half estimated that from one-half to all, and three-fourths reported that one-fourth to all of their workforce needs additional training.

Figure 7
Need for Training of Current Workforce



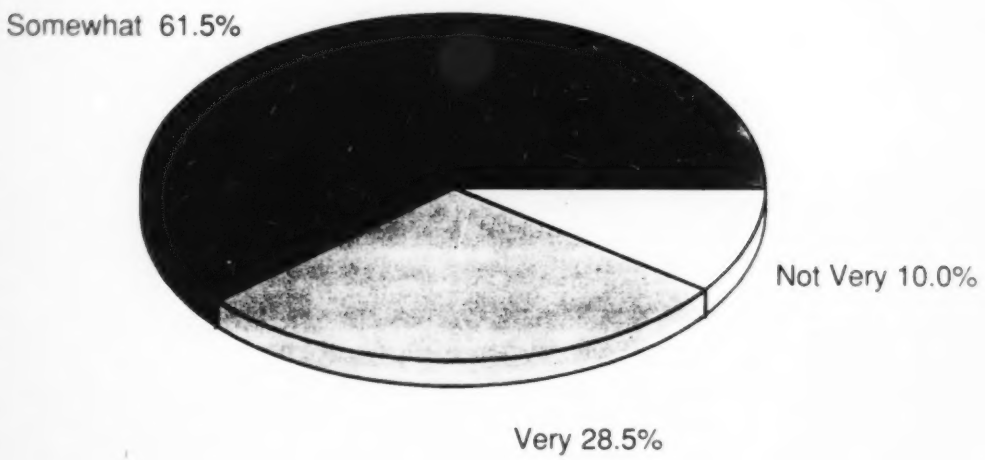
Role of Technology. The role of technology as a driver of training needs is well documented. Nearly all of Iowa companies and organizations saw technological change as an important driver increasing their need for workforce training. About one-half (53.1 percent) of the employers responded that technological change caused workplace change to some extent; almost one-third estimated change to a considerable extent. Only 15.6 percent of businesses saw technology influencing workforce training needs to a little extent, and 2.4 percent of the employers saw technology as having no effect.

Figure 8
Extent Technology Change Increased Need for Workforce Training



Employer Familiarity with Programs. Almost one-third (28.5 percent) of Iowa employers were very familiar with Iowa workforce training programs. However, the majority of respondents possessed limited familiarity with the programs. Just over six in ten (61.5 percent) of the businesses and organizations were somewhat familiar with workforce programs and services; ten percent were not very familiar. One employer suggested that the lack of greater familiarity with workforce programs may be the result of inadequate marketing. An employer commented, "Stronger understanding of college resources needs to be marketed on a more professional approach." Another employer noted, "I think many resources are available to use that, either we are not aware of or just don't think of this institution as a provider."

Figure 9
Familiarity of Employers with Various Workforce Programs and Services



Recommendations for Action

The preceding discussion provides a rationale for Iowa's community colleges to serve as the major provider of workforce training. However, in order for Iowa community colleges' continuing education divisions to realize their full potential as providers of workforce training, Iowa business and industry, and Iowa local and state governments need to work together to implement a plan for action. Following are several recommendations in this regard. These recommendations are consistent with a policy paper on workforce development recently published in Iowa and the policy statement of the American Association of Community Colleges on the role of community colleges in providing workforce training. (Iowa Association of Adult and Continuing Education Deans and Directors, 1996; American Association of Community Colleges, 1993).

- Iowa community colleges' continuing education divisions should *continue to serve the workforce training needs* of business and industry with high quality, flexible, and responsive programs.
- Continuing education programs should *concentrate on linking with distance education technology* to offer learning opportunities to a greater number of employees in Iowa businesses and organizations.
- Workforce training programs must *coexist alongside more traditional credit programs and receive comparable institutional support*, while at the same time remaining free of the constraints of traditional programs.
- Community colleges should *review and augment their marketing* programs; employers cannot use services if they are unaware of the programs.
- Existing state programs should *continue their support of high quality Iowa community college workforce training programs* that provide training at a time and place which is appropriate.
- In recognition of the increasing need for workforce training for Iowa businesses and organizations and the community colleges' successful comprehensive system of training programs, the state should *increase the funding levels of existing and emerging programs* for workforce training and should *consider new sources of funding*.

Epilogue. Educating and training a world-class workforce is key to Iowa's economic growth and ability to compete in the global marketplace. Iowa's community colleges are well-positioned to provide quality, cost-effective, and responsive workforce training to prepare a skilled workforce for the 21st Century.

The national community college policy paper on workforce training emphasizes the critical nature of workforce training at this point in our history:

> "The task of educating and training a world-class workforce that can think for itself and outperform the rest of the world is formidable, but the stakes have never been higher nor the potential rewards greater. If the nation fails to develop a workforce that can compete successfully in the global economy, it will be unable to provide the living standards to which its citizens have become accustomed; the gap between the rich and the poor will widen; and the nation's position as world leader will erode sharply. However if the nation can respond effectively to the challenge to develop the most skilled and adaptable workforce the world has ever seen, it will ensure the prosperity of its citizens into the second American century." (American Association of Community Colleges, 1993, p. 12).

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Appendix A
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